

1 ABSTRACT

To prevent unauthorized access to hardware management information in an out-of-band mode, i.e., when the operating system of the hardware is not executing, a method and apparatus employ an authentication protocol. Upon receiving a request for hardware component information in a service processor that is disposed in a hardware component, which request is received as an open session request and which request passes external to an operating system controlling the hardware component, the service processor transmits a challenge string to the requesting client application. In response to a challenge response received from the requesting client application, the service processor compares the challenge response to an expected response to the challenge. The expected challenge response is calculated by the service processor. Based on the result of the comparison, the service processor transmits an authentication response to the requesting client application indicating success or failure of the authentication process. On the client side, in response to a challenge string from the service processor, the requesting client application transmits to the service processor a challenge response, which includes an sequence number that increments with every new message from the requesting client application. The challenge response also includes a hash number calculated by the requesting client application, which hash number is a function of the challenge string, session identification number, sequence number and/or a password.

20 Each new packet including data and/or commands from the client application includes a similarly calculated hash number.